

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-2. (Canceled)

3. (Currently amended) An isolated antibody selected from the group consisting of any one of (1) – (13):

(1) — an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 143, 144 and 158, respectively;

(2) — an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 109, 110 and 111, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 143, 144 and 145, respectively;

(3) — an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 106, 107 and 108, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 140, 141 and 142, respectively;

(4) — an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 132, 133 and 134, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 167, 168 and 169, respectively;

(5) — an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 106, 135 and 136, respectively,

and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 170, 144 and 171, respectively;

(6)—an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 126, 127 and 128, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 159, 160 and 161, respectively;

(7)—an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 129, 130 and 131, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 162, 147 and 163, respectively;

(8)—an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 129, 130 and 131, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 164, 165 and 166, respectively;

(9)—an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 103, 104 and 105, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 137, 138 and 139, respectively;

(10)—an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 118, 121 and 122, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 155, 156 and 157, respectively;

(11)—an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 115, 116 and 117, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 149, 150 and 151, respectively;

(12)—an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 112, 113 and 114, respectively;

and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 146, 147 and 148, respectively; and

(13) — an antibody comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 118, 119 and 120, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 152, 153 and 154, respectively.

4-5. (Canceled)

6. (Currently amended) An isolated antibody selected from the group consisting of the antibody of any one of (1) - (7):

(1) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 84 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92;

(2) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 85 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92;

(3) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 86 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92;

(4) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 87 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92;

(5) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 88 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92;

(6) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 89 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92; and

(7) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 90 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92.

7. (Currently amended) The antibody as claimed in ~~any one of Claims 1-6~~ claim 3 or 6, which is a humanized antibody.

8. (Currently amended) An isolated antibody ~~having an activity equivalent to the activity of the antibody of claim 7~~, comprising a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 143, 144 and 158, respectively, wherein one ~~or more~~ amino acid ~~residues are~~ residue substituted, deleted, ~~or~~ added, ~~and/or~~ or inserted among the heavy chain CDRs and light chain CDRs taken together ~~from the amino acid sequences set forth in claim 7~~.

9-13. (Canceled)

14. (Currently amended) An isolated antibody capable of binding to a peptide consisting of the sequence of the amino acid residues 546 - 551 of glypican 3.

15. (Currently amended) The antibody as claimed in ~~any one of Claims 9-14 and 33~~ claim 14 or 16, which is a humanized antibody.

16. (Currently amended) An isolated antibody capable of binding to an epitope to which a second antibody is capable of binding, wherein said second antibody comprises a heavy chain

variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 143, 144 and 158, respectively.

17-18. (Canceled)

19. (Withdrawn) A polynucleotide coding for a heavy chain variable region or a light chain variable region of the antibody as claimed in claim 7 or 8.

20. (Withdrawn) The polynucleotide as claimed in Claim 19 having the sequence set forth in any one of SEQ ID NOs: 11-21, 33-43, 55-59, 65-70 and 77-83.

21. (Currently amended) ~~A cell growth inhibitor~~ A pharmaceutical composition comprising ~~as an active ingredient~~ the antibody as claimed in claim 7 ~~or 8~~ 3.

22. (Currently amended) ~~An anticancer agent~~ A pharmaceutical composition comprising ~~as an active ingredient~~ the antibody as claimed in claim 7 ~~or 8~~ 6.

23. (Canceled)

24. (Withdrawn) A peptide comprising the amino acid sequence of the amino acid residues 524 - 563 of glypican 3.

25. (Withdrawn) A peptide comprising the amino acid sequence of the amino acid residues 537 - 563 of glypican 3.

26. (Withdrawn) A peptide comprising the amino acid sequence of the amino acid residues 544 - 553 of glypican 3.

27. (Withdrawn) A peptide comprising the amino acid sequence of the amino acid residues 546 - 551 of glypican 3.

28. (Canceled)

29. (Currently amended) An isolated antibody comprising any one of (1) - (15) below:  
selected from the group consisting of the antibody of (1) - (15):

(1) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 174, 144 and 158, respectively;

(2) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 175, 144 and 158, respectively;

(3) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 176, 144 and 158, respectively;

(4) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 177, 144 and 158, respectively;

(5) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 178, 144 and 158, respectively;

(6) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 179, 144 and 158, respectively;

(7) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 180, 144 and 158, respectively;

(8) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 181, 144 and 158, respectively;

(9) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 182, 144 and 158, respectively;

(10) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 183, 144 and 158, respectively;

(11) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 184, 144 and 158, respectively;

(12) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124, and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 185, 144, and 158, respectively;

(13) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124, and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 186, 144 and 158, respectively;

(14) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 187, 144 and 158, respectively; and

(15) ~~an antibody comprising~~ a heavy chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 123, 124 and 125, respectively, and a light chain variable region having CDRs 1, 2 and 3 comprising the amino acid sequence set forth in SEQ ID NO: 188, 144 and 158, respectively.

30. (Canceled)

31. (Currently amended) An isolated antibody having a light chain variable region selected from the group consisting of (1) - (15):

(1) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 191;

(2) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 192;

(3) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 193;

(4) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 194;

(5) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 195;



(6) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 196;

(7) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 197;

(8) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 198;

(9) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 199;

(10) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 200;

(11) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 201;

(12) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 202;

(13) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 203;

(14) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 204; and

(15) a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 205;

and a heavy chain variable region selected from the group consisting of (1) - (7):

(1) a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 84;

(2) a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 85;

(3) a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 86;

(4) a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 87;

(5) a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 88;

(6) a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 89; and

(7) a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 90.

32. (Currently amended) The antibody as claimed in ~~any one of Claims 28-31~~ 14, 16, and 29, which is a human antibody.

33. (Canceled)

34. (New) The antibody as claimed in claim 14, which binds to a peptide separated by SDS-PAGE under reducing conditions as analyzed by Western blotting.

35. (New) An isolated antibody selected from the group consisting of the antibody of any one of (1) - (7):

(1) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 84 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92, wherein one amino acid residue is substituted, deleted, added, or inserted in either SEQ ID NO: 84 or SEQ ID NO: 92;

(2) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 85 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92, wherein one amino acid residue is substituted, deleted, added, or inserted in either SEQ ID NO: 85 or SEQ ID NO: 92;

(3) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 86 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92, wherein one amino acid residue is substituted, deleted, added, or inserted in either SEQ ID NO: 86 or SEQ ID NO: 92;

(4) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 87 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92, wherein one amino acid residue is substituted, deleted, added, or inserted in either SEQ ID NO: 87 or SEQ ID NO: 92;

(5) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 88 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92, wherein one amino acid residue is substituted, deleted, added, or inserted in either SEQ ID NO: 88 or SEQ ID NO: 92;

(6) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 89 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92, wherein one amino acid residue is substituted, deleted, added, or inserted in either SEQ ID NO: 89 or SEQ ID NO: 92; and

(7) an antibody comprising a heavy chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 90 and a light chain variable region comprising the amino acid sequence set forth in SEQ ID NO: 92, wherein one amino acid residue is substituted, deleted, added, or inserted in either SEQ ID NO: 90 or SEQ ID NO: 92.

36. (New) A pharmaceutical composition comprising the antibody as claimed in claim 14.

37. (New) A pharmaceutical composition comprising the antibody as claimed in claim 15.

38. (New) A pharmaceutical composition comprising the antibody as claimed in claim 16.

39. (New) A pharmaceutical composition comprising the antibody as claimed in claim 29.

40. (New) A pharmaceutical composition comprising the antibody as claimed in claim 31.

41. (New) A pharmaceutical composition comprising the antibody as claimed in claim 32.

42. (New) A pharmaceutical composition comprising the antibody as claimed in claim 35.

43. (New) A method for inhibiting cell growth comprising administering to a subject the antibody as claimed in any one of claims 3, 6, 8, 14, 16, 29, 31, and 35.

44. (New) A method for treating hepatoma comprising administering to a subject the antibody as claimed in any one of claims 3, 6, 8, 14, 16, 29, 31, and 35.

45. (New) A method comprising contacting a hepatoma cell with the antibody as claimed in any one of claims 3, 6, 8, 14, 16, 29, 31, and 35.

46. (New) The method of claim 45, wherein the contacting occurs in vivo.